

This involves what is practically the longest walk one can make on Rhum, along Kinloch Glen to the west, then south-west between Mam Tuath and Minishal, and, finally, more nearly southward, past Ard Nev and Ard Mheall to Harris, from which one ascends Ruinsival. Tedious as this journey is, still it is quite interesting; its insect population is never humdrum and at all stages, from Kinloch sea-level to 1000 ft. on Ard Nev and on to Harris, once again at sea-level, *C. rubi* never failed.

From these few notes it will be clear that this striking little butterfly is one of the most abundant and most widely distributed insects on the Isle of Rhum. Moreover, I feel that, had one the opportunities for the necessary examination, it will prove equally widespread on the neighbouring islands of Canna, Eigg and Muck. Further, I am convinced that its detection in the Outer Hebrides, especially in South Uist, depends simply upon a visit to the Coire Dubh on Beinn Mhor, and to similar localities, at the correct time.

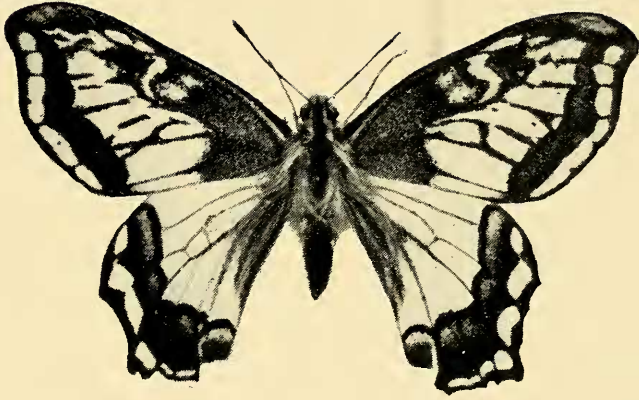
AN ABNORMALITY OF NEURATION IN *PAPILIO MACHAON*, L.

(Plate V.)

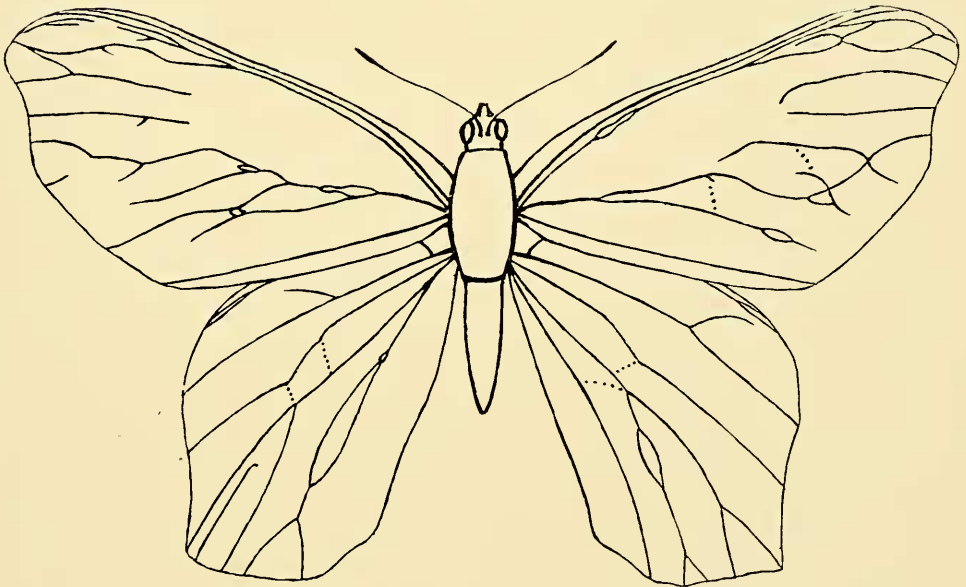
By E. A. COCKAYNE, D.M., F.R.C.P.

The specimen was bred by L. W. Newman in December 1935 from an inbred strain originating in Wicken Fen and was the only abnormal one bred from this stock. The abnormality of neuration is associated with a great alteration in shape and pattern. The forewings are shortened, the costa is slightly incurved about the middle, and the tip of the forewing ends in a blunt hook. The termen is concave near the apex and then convex. There is no tail on either hindwing.

The neuration is very abnormal and though it differs on the two sides there is some approach to symmetry in its arrangement. In the forewing on both sides 1 (submedian) is normal; on the right side 2 (M2) fails to reach the termen and is duplicated for a short distance; on the left side 2 arises from a duplicated part of the median and is united to 3 by ill-formed chitin about its middle, but fails to reach the termen. On the right side 3 (M1) is represented by a short spur; on the left side 3 is curved towards the inner margin and then away from it, but reaches the termen. On the right side the neuration is difficult to interpret, 4 (R3) apparently divides, but the first part of the outer or anterior branch is not present; where it reunites with the other branch there is a triangular piece of membrane enclosed by chitin and the nervure divides again; the inner branch fails to reach the termen and the outer unites with 5, but separates at once and fails to reach the termen. On the left side 4 arises from a duplicated bit of the median and fails to reach the termen. On the right side 5 (R2) reaches the termen after curving to touch 4 and curving away again. On the left side 5 divides twice, the inner branch of the first division fails to reach the termen and there is a breach of continuity in the inner branch of the second division, but the outer branch reaches the termen. On the right side 6 (R1) is normal, but on the left side there is a short spur, which if continued would unite with 5 where it divides for the



PAPILIO MACHAON, L.



PAPILIO MACHAON, L. ($\times 1\frac{1}{2}$).

